Improving Educational Quality (IEQ) Project

CRIQPEG: Centre for Research on Improving the Quality of Primary Education in Ghana

Participation by Girls in Ghanaian Primary Schools: Exploring Schools with Gender Equal Enrollments in a System Typified by Unequal Enrollments

Beatrice Okyere, University of Cape Coast Cara Cahalan, Fordham University Abigail Harris, Fordham University

Contract DPE-5836-C-00-042-00

Abstract

Early research findings from the Improving Education Quality Project (IEQ) served as the springboard for this investigation. As part of the larger IEQ investigation, the Centre for Research on Improving the Quality of Primary Education in Ghana (CRIQPEG) collected enrollment data from 14 primary schools in the Central and Western regions of Ghana. These data indicated that in some of the schools boys and girls were enrolled in approximately equal numbers, whereas in other schools the boys outnumbered the girls at all levels. Three gender equal schools and three comparable gender-unequal schools were selected for follow-up. Data were collected through classroom observations, pupil observations, pupil performance testing, and interviews with parents, teachers, head teachers, and relatively high and low performing boys and girls during the subsequent year. This wealth of information facilitated further exploration of the factors that may be operating to reduce female enrollments.

Rationale

Girls are underrepresented in Ghanaian primary schools. Little is known about factors within the school that may be associated with increased participation by girls. This investigation goes beyond the more typical question, "Are there gender differences?". The study examines differences between schools with gender equal and gender unequal enrollments to identify differences which may contribute to the lower enrollment of girls in many Ghanaian schools. Factors which were considered were enrollment patterns, classroom experience, academic performance, and home support for learning.

Methods

Sample

In February of 1994, baseline data were collected from 14 schools in Ghana by the Centre for Research on Improving the Quality of Primary Education in Ghana (CRIQPEG). Teams of CRIQPEG researchers traveled to each of the fourteen schools and collected pupil performance data by selecting samples of boys and girls in levels 2-5 and individually assessing their skills in reading (pre-reading, decoding, and comprehension), writing, and oral English (functional language, listening comprehension, and speaking). Following the achievement testing, individual pupils were selected for observation and follow-up (relatively high and low performing boys and girls in each classroom) and researchers conducted classroom observations, pupil observations, and interviews to explore issues related to language learning. Seven of the fourteen schools were selected to receive an intervention designed to improve language instruction and learning. These seven schools will be termed 'intervention schools' and the remaining seven schools will be termed 'comparison schools'.

Follow-up interview and pupil performance data were collected 18 months later (Summer, 1995). At that time attempts were made to test all children from the baseline group. When children were unavailable the researchers asked school personnel and community members about their whereabouts in order to track patterns of dropping out and transferring to other schools. When children, from the baseline sample, were not available for follow-up testing replacement students were selected and tested. Replacement testing was done in an attempt to maintain sample sizes of 25 subjects in intervention classrooms and 15 subjects in comparison classrooms.

As part of the analyses of baseline data, researchers noted that in 3 of the 14 schools girls were enrolled in approximately equal numbers as boys, while in the other schools in the sample boys significantly outnumbered girls. In order to examine these gender differences, a subset of Gender-Equal (GE) and Gender Unequal (GU) schools were selected for comparison using achievement measures, classroom observation, and interview data. The three schools that had approximately equal enrollments of boys and girls. An attempt was made to match each of the Gender Equal schools with a comparable Gender Unequal school in regard to region (Central or Western) and community (urban, semi-urban, or rural), and Intervention or Comparison school.

Unfortunately an appropriate match was not available for the urban GE school, Therefore the study was limited to rural, agricultural communities. The two schools (Gomoa Brofoyedur Roman Catholic, and Nyinase Catholic) have equal enrollments between boys and girls. Henceforth, the term Gender Equal (GE) and Gender Unequal (GU) will refer to these rural schools. The two GU schools (Aboom A.M.E. Zion, Atwereboanda D/C, and Old Daboase Junction Islamic Primary), had approximately four girls for every six boys. The two pairs were comprised of (1) two intervention schools in a rural community in the Central region, and (2) two comparison schools in a rural community in the Western region School population was larger in gender-equal rural schools then in gender-unequal rural schools, due to slightly larger town populations. Provided below are descriptions of each of the pairs.

Central Rural. School 2 vs. 4 The two central-rural schools were located in predominantly agricultural communities. Atwereboanda is located in the central region of Ghana. However many of the residents of Atwereboanda are migrant workers from the Eastern region. Levels 2, 4, and 5 are housed in a permanent structure built in 1960. Level three is housed in a mud and thatch classroom located near the first block. Since there are no walls to the level three classroom domestic animals are free to enter and leave, even while classes are in session. Most students sit in pairs to accommodate for a shortage of desks and chairs. Level three is forced to triple up; sharing 12 desks between 30 pupils. Most parents are farmers and send money home to the Eastern Region. Therefore poverty may seem more severe then the actual income earned. Only the head teacher lived in Atwereboanda. The other teachers walked 2-7 km each morning. It is possible that lower enrollment of girls is due to the school being located far away from the community. The level four class has the sole fully certified teacher. However all the teachers have taught for over six years.

Similar to Atwereboanda, Gomoa Brofoyedur is located in an agricultural region. The school was established in 1944 by the local Roman Catholic church. Today the school is run by the government. Farming is the primary occupation of most parents. The school is in need of serious structural repairs. According to school summaries the fourth grade class does not meet when it rains due to the severe leaks in the roof. Original reports showed that parents did not have any positive attitudes towards the quality of education at Gomoa Brofoyedur. However, parents have recently shown a keen interest in their children's education and believe that teachers have become more serious about their teaching since the CRIQPEG intervention began. Absenteeism and dropout rates were noticed. Materials are scarce, therefore coming to school does not automatically mean participating in classroom work.

Western Rural: School 13 vs. 7 Two other rural schools were selected in the Western region. The GU school, Old Daboase Junction was established in 1986. It is located in the Western region of Ghana. There are only three permanent classrooms, which house levels 4, 5, and 6. Levels 1-3 are located in mud and thatch structures. Old Daboase is an agricultural community and children are exposed to practical agriculture through the schools cassava farm. In 1994 absenteeism and school drop out rates were alarming. According to the school summary, pupils are usually driven out of class for fees. Contrary to the school summary, Old Daboase's attrition rate was not higher then other schools in the study.

Nyinase Catholic, a GE school, is also in a rural agricultural community. It is located in the Western Region of Ghana. Nyinase Catholic is managed by the Catholic Educational Unit in Cape Coast. However, the Catholic church on site does not contribute to teachers' salaries or supplies for the school. Levels two and three hold classes in the church while permanent classrooms are under constructions. Level four and five conduct classes in a wall-less shed outside of the church. Nyinase is one of the equity schools so the Primary Education Project (PREP) has supplied the school with desks, tables, and chairs. Neither levels 2, 3, 4, or 5 are taught by a professional teacher.

Procedures

<u>Pupil Performance</u>. Pupils were sampled from the participating classrooms. Twenty-five and fifteen students were selected from each class in the intervention and comparison schools, respectively. Levels two through five participated in the study in 1994. The students performance was measured during one-on-one testing using curriculum based assessment instruments developed by CRIQPEG/IEQ researchers. Each student was asked to perform a variety of tasks ranging from simple (writing his or her name and identifying letters) to the more complex (reading a passage from their textbook and answering comprehension questions on the passage). The baseline sample included 1032 pupils. Seventy-five percent of these students were located and re-tested 18 months later using parallel forms of the achievement measures.

Functional Items assessed the pupils ability to use basic English phrases. Phases such as "Good morning" "How are you?" and "What is the name of you school".

Listening Comprehension assessed the students ability to comprehend simple instructions such as "Point to the picture of a girl" and "Stand beside me".

Total Listening Comprehension

Oral Language

Oral Expression assessed the students oral proficiency in the use of the English language.

Total Oral Expression

Copy Letters required that the child be able to copy letters.

Correct Capital required that the child know

Write Name assessed the child's ability to write his or her first and last name.

Write Words assessed the child's ability to generate as many words as possible in a ten minute period of time. The child was then asked to read back the list of words. Only the words the child could read back and spell correctly were counted.

Percent letters correct assessed the percentage of letters written correctly after being dictated from a list..

Percent words correct assessed the percentage of words correctly written after being dictated from a list of commonly used words.

Concepts about Print required the child to know basic concepts about print such as that you move your eyes from left to right across the page and that a space between letters means a new word has begun.

Letters and Sounds required that the child read a list of letters (both lower case and capitals). The child was asked to identify either the letter name or sound.

Reading Most Used Words required that the child be able to read a list of the most used words in their English Readers.

Aided Reading assessed the child's ability to pick out a word from a list of the most used words in their English Readers. The words were dictated to the child.

Enrollment, Tracking, and Attendance. School enrollment data were obtained by counting the numbers of boys and girls on each class list in the school at the time of baseline data collection. Student attrition, transfer, and retention patterns were monitored by "tracking" pupils from the baseline sample. When pupils from the baseline group were not available for testing in 1995, information regarding their whereabouts was obtained from school personnel and community members. Attendance data were gathered in Summer of 1995 from headteachers.

<u>Pupil Observations</u>. During each set of observations (1994 and 1995), pupil observations were conducted by two observers during three separate English classes. The same four pupils (or their preselected alternates) were observed during each lesson. Pupils were selected for observation based on their relative performance within their classroom on the baseline achievement tasks. In each classroom, a low achieving boy, a high achieving boy, a low achieving girl, and a high achieving girl were observed. Every five minutes the observer completed a checklist which concentrated on three main categories; exposure/engagement with print, exposure to oral language, and practice with oral language.

<u>Classroom Observation</u>. Classroom observations of English lessons were done by two observers. The observers described the lessons and recorded the availability and use of classroom materials, language use by the teacher and student, strategies used by teachers to assess oral language and reading, and teachers responses to wrong answers. For this investigation, teachers' strategies to assess language and their responses to wrong answers were used to examine differences between Gender Equal and Gender Unequal schools.

Results

Enrollment and Tracking

In the overall study 76% of the 1,032 students tested in 1994 were re-tested in 1995, an attrition rate of 24%. The remaining 248 students were not available for testing in 1995, however, researchers were able to track most of the remaining students. Table 1 illustrates the gender and number of students, in GE and GU schools, tested in 1994, 1995, and in both years. Table 2 illustrates the breakdown of students who were still attending the same school, no longer attending school, or transferred to another school.

Table 1: Students Tested in Gender Unequal and Gender Equal Schools

				Studen	ts Enroll	ed			_					
		1994			1995		199							
School (#. Name)	Girls	Boys	% Girls	Girls	Boys	% Girls	Girls	Boys	% Girls					
Gender Unequal	62	84	.42	69	111	.38	41	61	.40					
2. Atwereboanda	39	50	.44	44	66	.40	20	31	.39					
13. Old Daboase Junction	23	34	.40	25	45	.36	21	30	.41					
Gender Equal	79	78	.50	102	105	.49	69	55	.56					
4. Gomoa Brofoyedur	47	50	.48	59	66	.47	45	37	.55					
7. Nyinase Catholic	32	28	.53	43	39	.52	24	18	.57					
Totals	141	162	.47	171	216	.44	110	116	.49					

Table 2: Tracking for Rural Gender Equal and Gender Unequal Schools

Rural GE and GU Schools	Gender Unequal			Gender Equal		
	Girls	Boys	Totals	Girls	Boys	Totals
Enrolled and Attending	41	60	101	66	54	120
Not Attending	21	20	41	2	4	6
Transfered to Other School	1	4	5	12	16	28
Totals	63	84	147	80	74	154
Enrolled and Attending	27.89%	40.82%	68.71%	42.86%	35.06%	77.92%
Not Attending	14.29%	13.61%	27.89%	1.30%	2.60%	3.90%
Transfered to Other School	0.68%	2.72%	3.40%	7.79%	10.39%	18.18%

The schools chosen as Gender Equal had female populations near fifty percent. There was a significant difference (p < .05) in the number of boys and girls enrolled in the gender unequal and gender equal schools. Also, based on the tracking data, there were differences in attrition between GE and GU schools with more pupils dropping out of school altogether from gender unequal schools and more pupils continuing in same or different schools in gender equal schools. Ten percent more GE students continued in the same school and fifteen percent more transferred to other schools. Most surprising was that 24% more children from GU schools were no longer attending school; approximately 4% of the pupils in GE schools had dropped out of the baseline sample whereas 28% of the pupils in the GU schools were reported to have dropped out. When the 2 urban schools are included, the pattern shifts in that neither urban school reported any pupils as "not attending". However, the higher rate of "transfer to other school" associated with gender equal schools persisted with 22% of the baseline group transferring as compared with 8% in the gender unequal group.

Replacement students.

Replacement students were selected from the class lists used at the time of baseline data collection. Replacement students tended to be boys. This was true in the

overall sample, as well as for the gender unequal and gender equal schools. However, there was less difference in the GE schools. The gender unequal schools used twice as many boys for replacement subjects. This may be explainable by unequal enrollments leading to fewer girls being available in small schools to serve as replacements.

Attendance.

Attendance records are currently unavailable. However, school summaries indicated that absenteeism was higher in schools which had fewer girls enrolled. This is not to say that girls have a higher absenteeism rate in those schools. Several other possibilities such as religion or poverty may play a role in this increased absenteeism. No significant gender difference was found when comparing students who were enrolled, but not attending.

Classroom Experience.

How much class time is spent teaching English? The amount of time spent on English lessons varied between schools. The Gender Equal schools allotted more class time to teaching the English language. The following table accounts for the number of hours spent on English each week for the four schools.

Table 3.	1994: Hours	ner week si	pent on Er	nolish la	mo1120e l	essons
i abic o.	1771.110410	per week b	ocite oil Li	61101110	TOMASET	Cooding.

	Hours Per Week on English Lessons								
		Lev	vel						
School (# and Name)	2	2 3 4 5							
Gender Unequal Schools	11.5	11	9.5	9.5	41.5				
2. Atwereboanda	7	6.5	5.5	5.5	24.5				
13. Old Daboase Junction	4.5	4.5	4	4	17				
Gender Equal Schools	8	8	7.5	6.5	30				
4. Gomoa Brofoyedur	2.5	2.5	2.5	2.5	10				
7. Nyinase Catholic	5.5	5.5	5	4	20				

How are English lessons structured? Although there were strong similarities, the classroom experience was slightly different between gender equal and gender unequal schools. Classroom observation data recorded the context in which teaching occurred. Every five minutes the teaching context was recorded. Contexts were categorized as one of the following;

- 1. Small groups with the teacher present
- 2. Small groups without the teacher present
- 3. Large groups or the entire class led by the teacher
- 4. Large groups or the entire class doing individual work
- 5. Transition time
- 6. Opening or closing discussion
- 7. Recess.

In 1994, a majority of class time (86-94%), was spent with the teacher directing the entire class. The remaining teaching time was spent in large groups doing individual work or small groups with the teacher. None of the classes spent any time in small groups with the teacher present. Table 3 illustrates the contexts in which teaching occurs.

It was expected that the context of instruction would change due to the interventions which took place in half of the GE and GU schools. However, data on 1995 context totals is unavailable at this time.

What teaching styles were used? In addition to teaching contexts, different styles of teaching were recorded by observers. Teaching styles were similar in respect their limited use of Ghanaian languages: teachers instructed almost exclusively in the English language. However, 1994 classroom observation data revealed that students in Gender Equal schools were more likely to choral English during lessons. This was not supported by pupil observations. Pupil observation data, from 1994 and 1995, showed that the Gender Unequal schools were more likely to use choralling of English as an instructional technique. This was true across all six schools observed. In 1994, Gender Equal schools the child and class choraled English in 37.94% of the five minute intervals observed. In Gender Unequal schools the child and class choraled English during 62.31% of the five minute intervals observed. In 1995, the four pupils observed, in GU and GE schools, were choralling English in 41-43% of the five minute intervals observed. However, the other children (non-observed pupils) in GU schools chorraled in an additional 17% of the five minute intervals. This means the children in GU schools may be engaged in off-task behaviors during 30% of the time the class is choralling English.

Another stylistic difference, was that teachers in GE schools were more likely to elicit free responses from the children. In 1994, children in GU schools were also observed speaking to each other in English more frequently (0% in GE schools vs. 6% in GU schools, p<.05). However in 1995 this trend no longer existed. The 1995 observations revealed that a child speak English to another child during 0-2% of their English class time.

Currently data is unavailable to report the amount of time spent on English lessons in 1995. However the 1995 data was available to access the classroom experience of children in gender equal and gender unequal schools. The 1995 data revealed that children in GE schools spend twice as much time using their textbooks. However, children in GU schools spend twice as much time using their exercise books and visual aids. The use of exercise books may be a direct result of the fact that children in GU schools have exercise books more than children in GE schools (17.76% vs. 7.35%; p<.05). There was no significant difference between GU and GE schools in regards to access to textbooks or visual aids.

Table 4: 1995 Pupil Observation Data

1995: Pupil Observation Data (4 Schools)						
	Gen	der Une	qual	Ge	nder Eq	ual
	Girls	Boys	Total	Girls	Boys	Total
Child has textbook	41.29	39.50	40.40	51.06	51.59	51.32
Child uses textbook	17.88	17.64	17.16b	37.14	31.31	34.22b
Child shares textbook						
Child uses shared textbook						
Child has excercise book	18.03	17.49	17.76a	7.84	6.43	7.35a
Child uses excercise book	16.75	16.26	16.51a	5.77	5.77	5.77a
Chid has other print	0.63	2.50	1.56	0.17	0.35	0.26
Child uses other print	0.38	2.25	1.31	0.00	0.17	0.09
Print on chalkboard	100.00	93.75	96.88	100.00	100.00	100.00
New print on chalkboard	44.60	41.16	42.88b	53.67	53.67	53.67b
Visual aid visable	34.89	37.39	36.14	30.67	30.67	30.67
Visual aid used	21.74	22.52	22.13a	11.20	11.20	
Child speaks English to teache	22.61c	30.99c	26.80a	8.39c	12.81c	10.60a
Child speaks English to other c	0.57	3.32	1.94	0.90	0.71	0.80
Child and class choral English	42.85	40.19	41.52	43.19	43.02	43.11
Child speaks Ghanaian to teach	1.41	3.62	2.55a	0.20	0.20	0.20a
Child speaks Ghanaian to other	5.03	6.45	5.74	9.88	7.14	8.51
Child and class choral Ghanaia	0.00	0.16	0.78	0.00	0.00	0.00
Teacher speaks English	90.44	87.28	88.86b	99.65	99.65	
Other child chorals English	19.05	16.08	17.57a	3.18	3.18	3.18a
Other child speaks English	71.61	70.40	72.82	78.17	78.17	78.17
Teacher speaks Ghanaian	10.49	12.21	11.35a	1.41	1.41	1.41a
Other child chorals Ghanaian	0.38	4.91	2.64	0.00	0.00	0.00
Other child speaks Ghanaian	18.81	17.86	18.33	27.39	26.39	26.89
a= Gender Unequal Schools > 0						
b= Gender Equal Schools > Ge	nder Un	equal So	chools (0<.05)		
c= Boys>Girls (p<.05)						

1995 observations of language use showed differences in teachers and students use of language. Teachers in GU schools spoke Ghanaian more (11.35% vs. 1.41%, p<.05) and English less (88.86% vs. 99.65%, p<.05), than teachers in GE schools. Children in GU schools choralled English more and spoke (English and Ghanaian) to the teacher more than children in GE schools. Children in GU schools choralled English in 17.57% of the classes observed, compared with 3.18% in GE classrooms. Children in GU classrooms were observed speaking to the teacher in English 26.80% of the classes observed. While children in GE schools were observed speaking English to the teacher in only 10.60% of the classes observed.

Classroom observers were asked to record whether a teacher called on another student, provided feedback to the student, provided remediation through modeling, provided remediation through analysis of the problem, criticized the child, encouraged the child to try again, ignored the error, or another response. There was only one significant difference between teachers reactions in GU and GE schools. Children in Gender Equal schools were less likely to experience criticism from a teacher after giving

a wrong answer. Classroom observation data revealed that criticism was used in 18% of the Gender Unequal classrooms observed, while only 2% of the Gender Equal teachers used criticism when a child gave a wrong answer. Gender Unequal and Gender Equal schools were similar in the fact that over half of all the teachers observed provided the students with feedback, called on another student, and encouraged the child to try again.

Table 5: 1994 Pupil Observation Data

	% of 5 r	ninute inte	ervals cont	ext was of	served	
	Gende	r Unequal	Schools	Gender Equal Schools		
	Boys	Girls	Total	Boys	Girls	Total
Child has textbook	31.06	32.98	32.02a	13.26	14.28	13.77a
Child uses textbook	10.17	11.81	10.99	09.18	09.18	09.18
Child shares textbook	20.89	14.83	17.86	11.47	09.18	10.33
Child uses shared textbook	83.33	08.79	46.06	05.10	07.65	06.38
Child has excercise book	19.24	19.24	19.24	14.28	13.77	14.03
Child uses excercise book	15.94	15.12	15.53a	07.90	07.90	07.90a
Child has other print	01.06	02.52	01.79a	00.00	00.00	00.00a
Child uses other print	01.37	01.37	01.37a	00.00	00.00	00.00a
Print on chalkboard	86.85	84.65	85.75b	98.94	98.94	98.94b
New print on chalkboard	37.38	37.38	37.38b	47.94	47.94	47.94b
Visual aids visable	47.82	48.66	48.24b	67.83	67.83	67.83b
Visual aids used	17.87	19.51	18.69	19.89	18.36	19.12
Child speaks English to teacher	30.78	28.58	29.68a	14.53	12.24	13.39a
Child speaks English to other child	06.87	09.07	07.97a	00.51	00.76	00.64a
Child and class choral English	39.03	36.83	37.93b	59.92	60.43	60.18b
Child speaks Ghanaian to teacher	01.65	01.93	01.79a	01.53	01.78	01.66a
Child speaks Ghanaian to other child	03.57	03.85	03.71b	07.40	06.12	06.76b
Child and class choral Ghanaian	00.00	00.00	00.00b	01.53	01.53	01.53b
Teacher speaks English	90.42	90.16	90.29b	97.41	97.41	97.41b
Other children choral English	34.63	37.11	35.87b	49.98	49.98	49.98b
Other child speaks English	57.17	57.17	57.17b	65.28	65.28	65.28b
Teacher speaks Ghanaian	10.99	10.99	10.99	08.16	08.41	08.29
Other children choral Ghanaian	00.55	00.55	00.55	00.00	00.00	00.00
Other child speaks Ghanaian	14.57	14.83	14.70b	20.14	22.18	21.16b
a= GU > GE (pŠ.05)						
b= GE > GU (pŠ.05)						

Pupil Performance.

Several differences between Gender Equal and Gender Unequal schools existed in both written and oral language tasks. Gender Equal schools scored significantly higher on functional items, concepts about print, oral expression, and listening comprehension. Copy letters was significantly higher for GU schools in 1994. By 1995, several differences between the GU and GE schools no longer existed. Copy letters, oral expression, and listening comprehension were not significantly different. Differences in

functional items and concepts about print was joined by several reading and writing tasks. Gender Equal schools had significantly higher scores on aided reading, reading most used words, percentage letters correct, and percentage words correct.

The differences in copy letters may have disappeared due to the fact that they are easier tasks which have been mastered by all students by third grade. By 1995 students in GU schools could copy all of the letters and of the students in GE schools could copy 99% of the letters.

Table 6: 1994 Pupil performance tests for Gender Unequal and Gender Equal schools.

1994: 4 Schools						
	Gender l	Jnequal S	chools	Gender	hools	
Skills Assessed	Girls	Boys	Total	Girls	Boys	Total
Oral Language Tasks						
Functional Items	1.78	1.46	1.59b	1.91	1.90	1.90b
Listening Comprehension	49.08	38.71	42.90b	53.63	61.32	57.00b
Total Listening Comprehension						
Oral Language						
Oral Expression	0.30	0.27	.28b	0.52	0.72	.61b
Total Oral Expression						
Written Language Tasks						
Copy Letters	0.88	0.93	.91a	0.83	0.74	0.79
Correct Capitals						
Write Name	0.5	0.46	0.47	0.41	0.32	0.37
Write Words	6.33	5.95	6.10	4.00	3.18	3.64
Percent Letters Correct						
Percent Words Correct						
Total # of Correct Words Per Minute	3.12	3.58	3.39	1.84	1.71	1.78
Reading Language Tasks						
Concepts About Print	4.23c	5.24c	4.83b	7.06c	7.20c	7.12b
Letters and Sounds	32.13	31.62	31.83	32.70	33.52	33.06
Aided Reading	21.00	21.07	21.04	17.91	19.00	18.39
Reading Most Used Words	20.18	18.25	19.03	9.83	14.60	11.92
a= Gender Unequal > Gender Equal (p<.05	<u> </u>					
b= Gender Equal > Gender Unequal (p<.05	5)					
c= Boys > Girls (p<.05)						

Table 7: 1995 Pupil performance tests for Gender Unequal and Gender Equal schools.

1995: 4 Schools							
	Gender Unequal Schools			Gender Equal Schools			
Skills Assessed	Girls	Boys	Total	Girls	Boys	Total	
Oral Language Tasks							
Functional Items	18.50	18.14	18.29b	18.86	19.26	19.04b	
Listening Comprehension	22.58	22.53	22.55	21.67	20.07	20.95	
Total Listening Comprehension	6.05	6.04	6.05	5.92	6.05	5.98	
Oral Language	90.75	94.81	93.15	88.89	93.41	90.87	
Oral Expression	49.68	54.12	52.31	48.85	55.20	51.71	
Total Oral Expression	13.23	14.17	13.79	13.25	16.45	14.69	
Written Language Tasks							
Copy Letters	1.00	1.00	1.00	1.00	0.97	0.99	
Correct Capitals	2.30	2.36	2.34	2.08	3.31	2.58	
Write Name	0.83	0.92	0.88	0.81	0.79	0.80	
Write Words	15.05	15.98	15.60	22.74	23.40	24.20	
Percent Letters Correct	45.51	43.91	44.54b	49.75	58.90	53.50b	
Percent Words Correct	34.47	33.21	33.70b	40.77	51.51	45.46b	
Total # of Correct Words Per Minute	10.97	12.59	11.93	13.10	16.66	14.70	
Reading Language Tasks							
Concepts About Print	7.44	6.88	7.11b	8.74	9.02	8.87b	
Letters and Sounds	41.18	43.88	42.78b	45.88	47.30	46.52b	
Aided Reading	52.21	55.16	53.96b	63.15	69.19	65.87b	
Reading Most Used Words	35.38	40.35	38.33b	48.48	57.19	52.40b	
a= Gender Unequal > Gender Equal (p<.05	5)						
b= Gender Equal > Gender Unequal (p<.05							
c=Boys > Girls (p<.05)							

Qualitative Analysis

Analysis of interview data from both schools suggests that parental gender biases are not the cause of gender unequal enrollment patterns. When asked whether they would send their son or daughter to school first, Parents at Gender Unequal schools tended to use qualifiers such as ability and age as determinants, while parents at Gender Equal schools tended to use gender as a qualifier. This was a surprising trend. Another finding was that children in both GE and GU schools were helped with homework by their sisters, rather then brothers. This is an important argument for the support of girls education. If this trend is prevalent the education of young girls may be then education of an entire household.